

$$\int_0^\pi \frac{d\theta \theta \sin \theta \cos^{2r} \theta}{1 - k \cos^8 \theta} \cdot (173), \quad \int_0^\pi d\theta \log_e \cos \theta \frac{\cos 2\theta + \alpha \cos 6\theta}{1 - 2\alpha \cos 8\theta + \alpha^2} \cdot (174),$$

$$\int_0^1 \frac{dx \cdot x^m}{1 - kx^n} \cdot \cdot (175), \text{ with many others.}$$

(Received February 4, 1881.)

I have received permission to write down formula (132) thus amended:—

$$\int_0^\pi \frac{\sin r\theta d\theta}{1 - 2\alpha \cos \theta + \alpha^2} = \frac{1}{1 - \alpha^2} \left( \alpha^r - \frac{1}{\alpha^r} \right) \log_e \frac{1 - \alpha}{1 + \alpha} \\ + \frac{2}{1 - \alpha^2} \left\{ \left( \alpha^{r-1} - \frac{1}{\alpha^{r-1}} \right) + \frac{1}{3} \left( \alpha^{r-3} - \frac{1}{\alpha^{r-3}} \right) + \dots + \frac{1}{r-1} \left( \alpha - \frac{1}{\alpha} \right) \right\}.$$

III. "*Polacanthus Foxii*, a large undescribed Dinosaur from the Wealden Formation in the Isle of Wight." By J. W. HULKE, F.R.S. Received January 3, 1881.

(Abstract.)

A description of the remains of a large Dinosaur, discovered in 1865 by the Rev. W. Fox, in a bed of shaly clay between Barnes and Cowleaze Chines, in the Isle of Wight. Head, neck, shoulder-girdle, and foreribs were missing, but the rest of the skeleton was almost entire. Some of the præ-sacral vertebræ recovered show a double costal articulation. In the trunk and loins the centrum is cylindroid, relatively long and slender, with plano-concave, or gently biconcave ends. Several lumbar centra are ankylosed together, and the hindmost to the sacrum. The sacrum comprises five relatively stout and short ankylosed centra of a depressed cordiform cross-sectional figure. The front sacral vertebræ have a stout short centrum.

The limb bones are short, their shafts slender, and their articular ends very expanded. The femur has a third trochanter, and the distal end of the tibia has the characteristic dinosaurian figure.

The back and flanks were stoutly mailed with simple, keeled, and spined scutes, and the tail was also sheathed in armour.

The animal indicated by these remains was of low stature, great strength, and probably slow habits. It is manifestly a Dinosaur, and is considered to be very nearly related to *Hylæosaurus*.